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(21) International Application Number: PCT/US99/09486 (22) International Filing Date: 29 April 1999 (29.04.99) (30) Priority Data: 60/083,405 29 April 1998 (29.04.98) US (71) Applicant (for all designated States except US): AMERICAN CYANAMID COMPANY [US/US]; Five Giralda Farms, Madison, NJ 07940 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): METCALF, Thomas, NY, III [US/US]; 10 Caywood Lane, Fairport, NY 14450 (US). ZAGURSKY, Robert, JM [US/US]; 569 Fox Hunt Drive, Victor, NY 14564 (US). OOI, Peggy [US/US]; 494 Main Street Fishers, Mendon, NY 14506 (US). (74) Agents: GORDON, Alan, M.; American Home Products Corporation, Patent Law Dept. - 2B2, One Campus Drive, Parsippany, NJ 07054 (US) et al.		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: VACCINES CONTAINING RECOMBINANT PILIN AGAINST <i>NEISSERIA GONORRHOEAE</i> OR <i>NEISSERIA MENINGITIDIS</i>		
(57) Abstract <p>The <i>pilE</i> genes of each of <i>Neisseria gonorrhoeae</i> and <i>Neisseria meningitidis</i> are cloned and their corresponding recombinant pilin proteins are expressed. In addition, a chimeric <i>pilE</i> gene is constructed in which the region of the <i>pilE</i> gene of <i>Neisseria meningitidis</i> class I encoding the amino-terminal region of the pilin protein is replaced by the corresponding region of the <i>pilE</i> gene of <i>Neisseria gonorrhoeae</i>. The recombinant meningococcal chimeric class I pilin protein is expressed at higher levels than the pilin protein expressed by the full-length <i>pilE</i> gene of <i>Neisseria meningitidis</i>. Furthermore, a chimeric <i>pilE</i> gene is constructed in which the region of the <i>pilE</i> gene of <i>Neisseria meningitidis</i> class II encoding the carboxy-terminal region of the pilin protein is replaced by the corresponding region of the <i>pilE</i> gene of <i>Neisseria gonorrhoeae</i>. The recombinant pilin proteins are used in vaccines to protect against disease caused by <i>Neisseria gonorrhoeae</i> or <i>Neisseria meningitidis</i>.</p>		

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